

Watershed Advisory Council Responses

Before the first Watershed Advisory Council's kick off meeting last January, participants received instructions to respond to two questions. At the conclusion of the first Watershed Advisory Council meeting, participants were asked to complete a one minute essay.

The following is a compilation of your responses.

The first two questions are organized so that the column on the left represents a broader category that the individual responses on the right were assigned.

Question 1: (Blue cards)

“What are your top three issues or concerns with water resource management in the Delaware River Basin today?”

TOPIC	ISSUES OR CONCERNS WITH WATER RESOURCE MANAGEMENT
<u>Comprehensive Plan</u>	<ul style="list-style-type: none">• Balance and cooperation between commercial interests & environmental interests.• Connecting stakeholders to policy development• Consistency• Consistency among States' objectives for supply growth.• Consistency among state's with regulatory objectives & approach.• Decisions are being make by narrow focus groups without input from <u>all</u> stakeholders.• DRBC management role - interstate vs. intrastate water. DRBC can not and should not do all, as is presently the case in PA. Also we need an accurate assessment of current and future consumptive errands and determination of the need for reservoir (FE Walter) flow argumentation for with support.• Lack of connectivity between headwater and bay communities.• Lack of effective watershed management.• Population growth concerns, and the choices that are being made now, will have unintended results years from now.
Estuarine Water Quality	<ul style="list-style-type: none">• The Delaware Estuary as a source of nutrients to the near shore Ocean and other estuaries.

Economics

- Agricultural & industrial & tourism.
- Economic well-being of the basin.
- If public objectives are to be attained that benefit the population at large, the private sectors, and especially land owners, should not bear the expense or suffer economic loss.
- In other words, do not devote inordinate resources to achieve what Stephen Breyer called " the final 10%".
- Need to devote resources to prioritized list of "problems" *
Put in Economics topic by WAC
- Objectives need to be reasonable, achievable, and strike an economic balance.
- Problem definition. * This was put in Economics topic by WAC
- Utilizing limited resources efficiently.
- Water management will infringe on my property rights and consequently diminish values.
- Lack of funds for tribe/sub-watershed (NY State)

Flow Management

Reservoir Operation Protocols

- Water Quality* (This was placed w/in a "ROP" topic by WAC)
- Allocation of flow in the river to meet the demands of competing uses, e.g. water supply, recreation, fisheries etc.
- Flood warning and protection
- Inadequate resources in Delaware Estuary/Bay
- Local flooding in Sub-basins
- Low flow in tribes.
- Main Stem Preparation.
- Need for flood protection on streams & rivers.

Out-of-Basin Withdrawals

- Pollution / Contamination (Put in an "OoB W/drawals" topic by WAC)
- Re-evaluation of the balance of control of the resource - the establishment of multiple flow objectives, not just one in Trenton.

- River flow management - impact on usage, temperature, etc.
- Strategy: In addition to the comprehensive plan, develop for each reservoir: Problem definition; objectives; reasonable strategy; metrics.
- Threat of further water diversions out of the Delaware Basin
- Water allocation (how do we deal with existing of future water use conflicts?)
- Water Flow
- We have not defined our role in flow management for other uses - Aquatic Biota, Recreation, etc. and we have not addressed tributaries.

Restoration / Habitat

- Contaminants in fish tissue - source identification.
- Ecologically Sensitive Tailwater flows.
- Environmental / Aquatic baseline requirements - complex issues about flow (minimum requirements), water quality species' needs.
- Fish consumption advisory.
- Fisheries
- Fisheries management - stock recovery, stock identification - habitat protection regulations.
- Increase Habitat for endangered species.
- Need to maintain adequate flows on the Upper Delaware to support and optimize Trout fishing & habitat.
- Restoration of impaired tributaries.
- Restore, maintain & enhance native biological communities in the basin - Shad.

Integrated Resource Management

- A detailed comprehensive Plan w/ Definitions, Objectives, Strategies and Metrics
- Groundwater/water supply
- Water Quantity / Supply*
- Low Level argumentation
- Need for Groundwater Management
- Water supply especially during drought.
- Adequate water supply for all basin states
- * These items were group w/in the IRP topic heading by WAC
- Water supplies are affected by weather use restrictions

Land Use

- Lack of integrated planning about land use
- Controlling the rate and location of Development.
- Integration and management of the various water sources in the basin, i.e. hydro., water supply, ground water to achieve overall quantity / flow goals* This was placed in the LU topic by WAC group
- Lack of comprehensive land management - i.e. sprawl
- Land planning and water resources planning are not now integrated.
- Local municipal, county and state land use issues, planning, zoning, transportation as they impact water.
- No link between resource management goals local land use decision making
- Optimize flow management from key basin storage reservoirs to address withdrawal and instream uses.
- Population Growth / Land -use Patterns
- There is a significant disconnect between the roles of DRBC and the states, and local municipal planning bodies. Land use decisions and water resource allocation decisions are often at odds. Water resource management education planning sorely needed in the local level.

Public Outreach and Education

- Insufficient education of local officials & insufficient support for enforcement of regulations at local & state level re: best management practices design, etc.
- Management Goals... Lack corresponding education component.
- Monitoring and community education.
- Promote comprehensive smart growth education by developing an array of awareness building tools that support sustainable development.

Water Quantity

- Adequacy of water for all essential needs - instream and consumptive - present and future. An adequate supply, during drought, is essential to mountain prosperity. Our water in each region should provide a competitive advantage over other water short regions in the U.S. And we need to determine acceptable use of shortfall at time of extreme drought.
- Adequate water supply for all basin states.
- Are we adequately addressing ground water supply management in the basin?
- Conjunctive uses of water (the interrelationship of ground and surface water).
- Drought
- Drought management (including sub-basin drought difference).
- Groundwater management & control.
- Groundwater withdrawal regulation & protection.
- Groundwater/water supply
- Improve water quality on all major tributaries* Put into WQ topic by WAC
- Lack of water supply development.
- Low flow augmentation
- Low Level argumentation
- Maintaining adequate water supply for human needs as well as ecosystem health.

- Need for Groundwater Management
- Need to establish sound science - base procedures to evaluate cumulative impacts of instream withdrawals and ground water withdrawals on instream base flows and instream aquatic habitats.
- New York City taking too much water
- Not enough water for recreation: canoeing, rafting, kayaking, etc. especially on the upper Delaware north of Matamoras - Port Jervis area. It should never get below the 3' level (at Barryville gauge)
- Out of basin (and inter-watershed diversions)
- Quantity management
- Reduce sediment entering streams w/in basin.
- Reduce stomp (sic) water flows
- Reduce water being wasted in the system.
- Secure a sustainable water supply condition to meet needs throughout the basin.
- Storm water controls.
- They need to look at Hudson River for the future. Pipes carrying water are leaking too much!
- Water conservation / protection practices implemented at all times (not just during droughts).
- Water discharge during drought is non-discharge option.
- Water quality * Put in Q topic by WAC
- Water Quantities - flows both drought and flood, and including ground water
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- Water quantity (including conservation measures).
- Water supplies are affected by weather use restrictions
- Water supply especially during drought.
- Water supply planning
- Water Supply Sources
- We are currently managing main stem flows for water supply and drought

- We do not have an adequate handle on all of the water use in the basin and it is hampering our ability to adequately manage the resources.

Recreation

- Recreational resources in Delaware Estuary and Bay.
- Maintain instream flows for a variety of recreational uses.

Access for Recreation

- NYC Withdrawal Protocols* (Placed w/in "Access for recreation" by WAC group)
- Public Use/Access

Regulatory/Legal

- Easing the regulatory burden, or refraining from the implementation of new regulations w/in the Del. River Basin.

Groundwater Modeling

- Groundwater modeling and regulation
- National regulations rather than state regulations addressing environmental interests such as ballast waters, ground water run-off.

Regulating/Consistent/Water Supply (sic)

- Need for consistent and comprehensive state-wide water resources law in PA.
- addressing integrated nature
- ground and surface water
- water quality and quantity.
- States have different requirements for what is monitored and the degree of accuracy in reporting

Water Quality

- Achieve WQ
- Achieving WQ standards and protecting and restoring living resources by developing and implementing effective point and nonpoint source control programs (ex. Needed infrastructure, trading, government, integration of resources, and innovative voluntary approaches).
- Anti-degradation.
- Bring all basin streams into compliance with water quality standards and designated uses.
- Clean water concerns will make my business non-competitive with other regions.
- Degradation of water quality from non-point source pollution

- Establish achievable NPS, TMDL for restoring impaired streams
- Ground water degradation from on lot systems.
- How (to) quantify
- Inconsistencies between states' water quality management programs esp. 303(d) lists & TMDL schedules.
- Need to restore water quantity where below standards, maintain or enhance where above standards, e.g. PCB's.
- Non Point Sources of Pollution
- Persistence of toxins in water & air within Delaware River Watershed, plus lack of investigation & documentation of sources & effects on human health, and lack of awareness concern by public.
- Reducing non-point source pollution.
- To provide the general public with safe drinking water in accordance with federal standards.
- Toxic Regulations.
- Toxics; mentioned 3 times
- Toxics in the Delaware Estuary
- Toxics including endocrine disrupters.
- Unregulated, nonpoint sources have impact on water quality.
- Water quality - to sustain healthy human populations other living resources.
- Water quality during drought
- Water Quality Management
- Water quality of the river; especially concerned about pollution from all the sewage discharges cropping up even on the upper Delaware.

Watershed Advisory Council Responses

Question 2: (Yellow cards)

“It is now the year 2030. What are the top three accomplishments in water resource management in the last 30 years?” (Include as many details as possible on “how” the changes were made.)

TOPIC

Comprehensive Plan

SUCCESS INDICATORS

- True buy-in by all states involved (state & local government) funds from each state. Community support.
- DRBC has coordinated all of the various states' and agencies' duplication of effort so that local enforcement is not confusing to stakeholders
- Improve partnerships among government agencies and private sector (industry) and all other watershed constituents
- Improved intergovernmental cooperation to achieve water supply goals, water quality
- Local municipalities join together in planning consortiums recognizing watershed boundaries
- Open communication and plan for resource releases at headwater
- Open space, nps control programs have partnered to accomplish this goal basin-wide

DELEP

- Estuary separated from headwaters in river for planning purposes - one agency cannot serve the varying interests from New York to Delaware

Economics

- Coordinated plan for development of the commercial interests located on the waterfront with environmental interests.
- Marinas constructed and real estate booms along river and debris removed from river and shoreline
- Drought protection/insurance is achieved and the region is prosperous
- Cold water and warm water fisheries are at all time highs with commercial fisheries reopened and sustainable in the mainstem and in the estuary
- Corporate interests aligned with environmental health of the river

Government

- Government seed money leverages private dollars
- Funding at the federal level on a par with other similar resources (like the Chesapeake Bay for example). It happens c.2002!
- Local planning no longer mandates degradation - dovetails with resource management goals
- DRBC leads in the stewardship of the resource - including technical assistance to stakeholders
- Continuation and growth of DRBC as a regional water resource management agency
- Federal, state, local management consistent affording better coordination, data transfer, and accountability and monitoring

Habitat

- Full support of all components at the river's various ecosystems.
- Restoration of most tributaries and wetlands to an acceptable/functional ecological state by land stewardship programs, riparian buffer incentives/initiatives, open space initiative, waste water treatment improvements, toxic waste reduction, and agricultural runoff mitigation
- The riparian habitats of the mainstem and tribs have been restored and protected

Integrated Resource Planning

- An easily digestible plan that "leads by example" - a product that provides a planning framework, philosophy and goals that not only serve the needs of DRBC; but that others can build onto at all levels throughout the basin.
- Integration of land use decision making with water resources management
- The comprehensive plan has an integrated approach to managing ground water supplies in the basin, covering interstate usage and demand
- Developed an integrated ground water modeling system which allows for rational decision making
- Relationship between surface and groundwater better understood and managed as one resource - goals, methods, and source conveyed and understood by those who use resource
- Local land decisions are fully integrated with watershed and basin water resources management plans
- An accurate and agreed-upon cost benefit analysis has been performed which describes the values of water as it pertains to its intended use within the basin; i.e. water supply vs. Recreation vs. Hydroelectric generation, etc.

Land Use

- Lands are developed in a compact manner with a high level of stormwater treatment
- Basin wide floodplain management and groundwater protection and withdrawal plans enforced.
- Regional development driven by water based zoning. This accomplished by public education initiative (change in public perception; local/regional ordinance based on good science; resurgence of watershed associations; economics - long term costs of alternatives
- Passage of enabling state land use laws controlling sprawl
- Reduction in the frequency and impact of floods by land acquisition, riparian easement, upland infiltration programs, agricultural runoff control, impervious surface regulations, and backyard stewardship
- Well planned, contained areas of growth, with large amounts of high quality habitat in open space acreage in all communities. Revitalized urban and inner suburban regions. Green corridors connecting all open spaces

Public Outreach and Education

- Corporate awards publicize efforts
- Everyone knows they are in the Delaware river basin
- Adult/community education
- Youth programs
- Signs on highways
- River recognized fully as an important resource, not just as a waste water assimilator or salt line controller
- Tributaries (larger ones particularly) are understood as if they flow directly into the Atlantic Ocean
- Every school district throughout the entire basin has water/watershed education at several levels within its curriculum
- Public understands freshwater is finite resource. Change in public mores regarding water use. Public actively conserving water for future generations and acknowledges other living resources needs and our connection to those living resources
- Local planners are more knowledgeable and play a role as stewards
- Visitors and residents of the Delaware River Basin are all knowledgeable of the asset and live their lives in a manner that protects and enhances the basin
- Public outreach/education: water quality improves, public knows what they can do to improve water quality by not contributing to non-point source pollution. Citizens understand their stewardship role in protecting water quality. Public actively involved in monitoring water quality
- Corporate environmental stewardship is encouraged
- Widespread public stewardship of their individual "watershed garden"

Water Quantity

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- The water quality and water quantity are better now than they were in the year 2000
- All major wastewater dischargers are recycling their wastewater back into the water supply stream
- River flow issues resolved.

- Implemented water supply plans to meet municipal and industrial needs, including conservation measures and physical storage.
- We have defined the flow requirements for the mainstem and all major tributaries for multiple uses - water supply, water quality, recreation, aquatic biota, industrial uses, etc. And we have developed a resource management approach to meet those flows during all but the most severe droughts
- Supply availability in 30 years - few reservoirs - groundwater main source
- All municipal and investor-owned water utilities are interconnected in the basin for daily water transfers and emergency supply back-ups
- The water still makes it all the way to the Atlantic Ocean (see Colorado)
- Available water supply is accomplished in part through early understanding of supply, users, growth potentials, an
- understandable plan which is unquestioned in competency, science and public policy, and inter-jurisdictional alignment
- A “user-friendly” flow management model has been developed and successfully applied within the basin, thus facilitating management discussions amongst the many
- Water availability for industry during droughts
- Water needs are currently met for basin and New York city users
- Water supply needs have been temporarily satisfied by the development of additional storage
- Great year-round trout fishing by increased flows to maintain temperature for trout
- Reduced water losses to keep enough water in system for all users
- The lower basin is not wholly dependent upon NYC reservoirs and the drought operating rule is modified recognizing variances in upper and lower basin conditions
- Construction and use of a new water source facility in the basin - accessible to the whole basin
- New York city has cleaned up the Hudson and will draw its water from it. This will help Delaware River flows in general

- Implemented structural and non-structural flood protection measures to safeguard majority of basin, plus warning systems to cover floods beyond control
- Use restrictions avoided by water conservation initiatives
- Balanced water use of the basin (enough for all uses)
- Water conservation by users
- Safe recharge by users
- Controls (a series of preconditions set by state statutes and, if necessary, by DRBC regulation) on inter-watershed (sub-basin level) water (including wastewater) diversion
- Flow for fisheries improved by increased storage capacity of NYC reservoirs, reduction of leaks in NYC system, financial resources to better manage existing water resources, and NYC fixes Croton system to limit need of Delaware River

Recreation

- Return of public to our rivers and streams the Philadelphia region becoming a major destination for summer water recreation activities
- Delaware estuary and bay - a centerpiece for water related recreation
- Flood plains are now parks and permanent structures removed
- Greenways along every tributary of the Delaware River, with many, many access points for the public
- Recreation is much more accessible and encouraged. Achieved through open space initiatives and perhaps mitigation for cross-media regulatory requirements. Also achieved through greater access and communication of access
- Lots more public use of river effected by condemnation of riverfront lands by governments and promotion of birding/fishing/, etc.
- Recreational endeavors are more prevalent, as well as wildlife habitat along the Delaware. Residents and visitors can enjoy clean drinking water and the pristine natural environment
- Sport fisheries have been restored and fish are safe to eat

Good Science and Technology

- Develop a comprehensive data management system that assists in complex water resource decision-making.
- We have a complete database of water use in the basin with data on each withdrawal point going back 30 years - for all withdrawals over 100,000 gal/month. Both monthly and annual totals
- Implementation of scientifically sound thresholds of in-stream flow management to protect base flow and aquatic habitat

Water Quality

- All fish and shellfish are safe to eat
- All waters are safe for swimming
- The states and DRBC have adopted uniform water quality standards and procedures for assessing attainment with those standards
- The water quality and water quantity are better now than they were in the year 2000
- Control of non-point sources of pollution - incentives provided to enable participation in improvement.
- As TMDLs are developed, pursue full implementation to achieve water quality standards.
- Control of non-point source pollution through better regulations and public linkage of the impact of land on water quality and quantity.
- Fish are available to eat without restrictions. Accomplished through; early problem definition; understanding conditions which contribute to restrictions; and Goals achieved effectively, yet in a non-wasteful manner.
- Scientifically based management practices have resulted in quantifiable water quality improvements within the basin
- Fish consumption advisories no longer needed
- Ground water quality degradation from on lot mounds and in-ground. Need for regional treating plants
- More recognition of cleaning up the river of debris, trash, etc. Kittatinny canoes began the process of cleaning the river in 1990 and will probably be still doing it. Other organizations will follow their accomplishments
- No net loss of quality (at a minimum) since 2001

- Full recovery and maintenance of basin's fish stocks
- WPCP upgrades to control pathogens
- River quality better overall. Less pollutants, etc. More awareness of keeping water quality up and river clean
- All waterways restored to pristine or near pristine condition; restored wildlife populations. Highly informed and educated public conducting extensive stewardship
- Business and public needs for clean and plentiful water have been met. There is recognition that the environment can be saved, but only by ensuring that the economy is not penalized by businesses carrying on commerce in a way that was acceptable in the past
- Established nps and ps TMDLs for all impaired streams and achieving those TMDLs in all streams of the basin
- Water quality is no longer impacted by non-point, unregulated sources (cooperation, collaboration)
- Nutrient management runoff, TMDLs, non-point, and all of the various programs have evolved and cohesively come together. Goals for clean water have been met through education and new technologies
- Source water protection goals and initiatives provide beneficial results and the clean water act is re-authorized with recognition of the ecological and stewardship visions expressed in "flowing toward the future" document. Need much better coordination of 20+ federal environmental programs including SDWA, CWA, etc.
- Water re-use programs
- Stormwater (and what it carries) from virtually all storm events is dealt with on site (infiltrated, reused, etc.) Accomplish by state statutes allowing local controls
- Removal of endocrine disrupters from the Delaware River system. Accomplished through aggressive research followed by appropriate regulations
- TMDLs have been established and implementation strategies have been effective in addressing toxics. Habitats have been restored, including fish passage to traditional habitats

WATERSHED ADVISORY COUNCIL ONE MINUTE ESSAYS

At the conclusion of the Watershed Advisory Council's kick-off meeting on January 17, 2001, participants were asked to write a one minute essay.

“What is the one outcome of comprehensive planning process that will make you feel it is a success?”

- Input and interaction by all four states and fed with interests of other stakeholders included in the process will help it be a success.
- Being able to see the varying perspectives as part of the new comprehensive plan is important to it's success. Both consensus or majority plus other opinions a change and addition to the current plan.
- The comprehensive plan will be a success if it sets clear goals for water quality, fisheries, ground water and floodplain management enhancement that are relatively consistent and supported by all the basin states, major municipality, major business and state ad federal agencies.
- If the process produces a plan with results based outcomes, means to measure progress toward goals and a clear strategy for implementing the plans desired results, including lead roles, schedule and resources to accomplish the outcomes. Rather, that be all things to all people, the plan should prioritize and focus the most important issue areas where results are essential, for example: key water quality improvements, habitat restoration and protection goals, water quantity targets that protect ecosystem health.
- General understanding that there are multiple types of interests demands in and on the river as a resource. The comprehensive plan will be most successfully if it thoughtfully addresses the needs of all the resource users. I think this means in part balancing the desired objectives of natural resource advocates with respect to achieving a pristine estuary along with the objectives of developers or industry whose needs may be at odds with this sort of objective in terms of economic viability. Any and all schemes for balancing the resource needs and uses will ultimately have an impact on the 7.5 million basin residents or 18 million basin-dependent people. This impact includes availability of the river/estuary for fishing, recreation, etc. And personal cost associated with drinking water quality and funding for municipal wastewater treatment costs, plus indirect cost or benefit associated with economic development, job growth, or the converse.
 - Common agreement on most issues of vital concern by all council members.
 - Total Intergovernmental coordination
 - Technology Transfer (GIS)
 - Governmental departments coordinated (i.e. water quality & supply)

- For holistic management approach
 - Local / state agencies on same page with land use decisions, growth management, natural resources protections
 - Public outreach that explains local/state policies, authorities, future vision for growth and natural resources protection to create united force to insure states at the basin grow responsibility, manage basin natural resources with conservation as the focus.
- The one outcome of the planning process that will make it a success would be that it is embraced by “decision makers” and sufficient funding, staffing and authority will be provided to allow recommendations of the plan to be implemented. Without the funding, staffing and AUTHORITY the plan will only be an exercise in futility. I’ve been around state government to long and have seen to many planning projects take off like a rocket only to end up in a garbage heap, because there was no commitment to implement it. Such experience kind of saps your zest for planning. I was not born a cynic. It something I gained through 35+ years of experience in State government.
- A document that is accessible and understandable, and that resulted from a process which:
 - Encourages meaningful dialog
 - Has consensus by it
 - Is based on good science more so than fear, perception or dread
- A healthy, vibrant Delaware River ecosystem with no water quality impairments or fish advisories.
- A successful outcome of the Watershed Advisory Council’s work on the Comprehensive Plan will be an easily accessible plan that can & will be implemented by DRBC and stakeholders states, conservation districts, watershed associations, businesses from the basin.
- All constituencies are heard; all issues are addressed.
- A broad watershed based plan that lays out and prioritizes the issues and challenges and potential short-term and long-term solution to the issues/challenges, a vision and plan for implementing these solutions, and -last but not least- a “marketing education” element to sell it to the public.
- One outcome of Planning Process that will make it a success is a clear definition of the issues/problems that exist in the basin coupled with a synthesis of all the conflicting views associated with those issues.
- Problems should be weighted as to their importance. In addition, a detailed implementation plan geared at addressing these problems should be designed and an overall system for assessing the effectiveness of the plan should also be delineated.
- To agree on some broad water resources management goals which will guide staff and the various committees toward continuing improvements in the watershed.
- One outcome that will make me feel this process is a success will be if the industrial States adapt and incorporate the DVRPC Plan into the state plans and policies.
- The best outcome will be a plan that prevents actions by agencies, groups, and organizations that conflict and are counterproductive.

- The comp plan will serve as a catalyst and springboard for balances that will promote reactions of water quality/quality goals necessary to sustainable resources and economies regulatory (planning, ed....) and non-regulatory (might have to have a permit) tools.
- Public enthusiasm (expressed at the public hearings) for the plan and, more specifically, for the implementation actions that are recommended by the plan. Enthusiasm might also be expressed even better by public groups and other agencies taking on the implementation actions that are beyond DRBC's scope or ability.
- The four states, federal government, and NYC recognize the impacts that their actions relating to water resources have on the entire basin, and plan accordingly.
- Development of a practical, implementable plan to insure an adequate supply of clean water for municipal and industrial users in the basin. The plan should address surface and ground water sources, and should cover drought situations. It should also address conservation measures.
- The DRBC should perform its function as a parent and coordinator to the various state and local governments and agencies that essentially are seeking similar outcomes.
- Regional planning will stop confusing and conflicting policies.
- Sensitivity to stakeholder and minority concerns considered in consensus development.
- That the implementation elements of the plan are agreed to be implemented by the implementing agency, (otherwise it will be a dust collector!)
- Greatly improved flows for the trout fishery on the Upper Delaware without adverse affects on other users. This is a sustainable and possible goal.
- Will there be a document that is produced that can be called "The Comp. Plan"?
- What will make that plan a success?
 - a) It must have measurable results
 - b) Does not bite off too much – streamline and cover several issues well rather than too many issues
 - c) Clear time line
 - d) Do not list actions by others unless you know they will do them
 - e) Make this more doable actions rather than advisory to municipal governments the counties and/or state can serve that role
 - f) Look for on the ground projects that DRBC can put together with several partners.